THE MARINE RECORD.

DEVOTED TO COMMERCE, ENGINEERING AND SCIENCE.

VOL. VI. NO. 9. CLEVELAND, O., FEBRUARY 28, 1884

$2.00 PER ANNUM
SINGLE COPIES 5 CENTS

AROUND THE LAKES.

CLEVELAND.

Judge Welker has returned from Indianapolis.

Captain John Cramer, of Tonawanda, was in the city yesterday.

William Prince, engineer of the Sheldon, has been confined to his bed for some time.

Captain William Case and daughter have gone on a visit to friends in York State.

The penalty is $100 if a mate or captain is found in charge of a Canadian boat without a certificate.

The schooner I. N. Foster has been sold by Clark I. Botts to E. Chilson and others. Consideration $8,000.

The schooner George Sherman has been sold by Everett and others to William Jones, of Black River. Consideration $8,000.

The new steamer being built at St. Clair for Woods, Perry & Co. will be fitted out by Upson & Walton. The engine will be put in by the Globe Iron Works.

Messrs. Dewhirst Bros. and Williams have bought the tug R. K. Hawley at Lorain, of the Lorain, Tuscarawas Valley & Wheeling railroad. Consideration $4,000. She will be used in towing at Cleveland harbor.

Captain G. P. Leon is a target before the Common Pleas Court in a suit for damages in the sum of $5,000, brought by Miss Adams, who was cook on Captain Leon's vessel during the last season.

George Henderson, who was a seaman on the schooner Mears on Lake Huron, and who was charged with disobeying the captain's orders at a time when he had the wheel, pleaded not guilty. The case will come up for trial in a week or ten days.

The suit brought by Messrs. Upson & Walton at Buffalo against the Lehigh Transportation Company has been decided in favor of plaintiffs. It was brought to ascertain how much authority a captain of a vessel has in ordering goods before his vessel has been registered.

Captain Enman, formerly of the steamship Hiawatha, will take command of Captain Thomas Wilson's new steamship, now building at Quayle's Sons' shipyard. The other vessel being built at Quayle's will be similar to the above and finished for steam but will be used as a consort for the present.

The suit brought in the United States District Court in this city by Robert Tarrant, of Chicago, Ill., against the steam tug American Eagle, owned by Edward Dahlke of this city, in which Tarrant claimed $284.88 due him for material, repairs and labor furnished the tug in 1882, while she was in Chicago, has been settled between the parties and dismissed.

Rosel Downer, sub-marine diver, of Chicago, is in the city to depose in a case wherein Captain P. Finley has sued Mr. Guiles, of the Cleveland Mercantile and Marine Insurance Agency, for damages in $20,000. It will be remembered that Captain Finley was master of the Jane Bell when she went ashore seven miles this side of Ashtabula during the season of 1880. It is said that Mr. Guiles made a statement that Captain Finley ran the schooner ashore purposely.

Captain Goodwin and the Cleveland lifesavers returned from Covington last Thursday after nine days' service with the flood stricken people of the Ohio valley. On Wednesday, before their return, the citizens of Covington, at a public meeting, voted each member of the crew a ten dollar gold piece to be appropriately engraved, as tokens of appreciation of the value of the exertions made by the crew. Volunteer N. Tovat went with the crew, as usual.

In the case of collision between the schooner Minnie Davis and the barge Harvest in tow of the tug Fannie Tuthill the details are as follows: On the 25th of October, 1880, at about ten o'clock, a. m., the schooner Minnie Davis was lying at the docks on the east side of the Cuyahoga river between St. Clair street and Upson & Walton's store. The tug Fannie Tuthill about the same time came up the east side of the river having in tow the lumber barge Harvest, and when near the Davis, signaled the barge to starboard and go clear of the Davis. Instead of obeying the command, however, the Harvest went out of her course and to port and notwithstanding the efforts of the tug to pull her to starboard, she ran into and collided with the Davis cutting into the stern of said Davis about four feet, smashing the stern and staving it in nearly to the water's edge, breaking and cutting the transoms, frames, deck beams, driving the cabin and decks forward a foot or more, and thereby severely straining and weakening the after part of the vessel. It is claimed on the part of the libellants, Messrs. Humphrey, Sisson and Walter Fox, of Alexandria Bay, N. Y., owners of the Minnie Davis, that the tug was going at a rate of speed too rapid for such a narrow place in the river, and that both tug and barge were carelessly and negligently handled. The officers of the tug claim that the officers of the barge failed to obey their commands, and the officers of the barge deny this and claim that they obeyed the signals of the tug as they were bound to do. The officers of the tug further claim that the barge was very hard to tow, not having good steering capacity. Judge Welker, in the District Court, decided that both the tug and barge were to blame, and the matter being referred to Earl Bill as commissioner to ascertain and report the amount of the damages sustained by the Davis, the commissioner reported as follows: For repair of stern, $100; for repair of bow, $175; for towage for dockage; $35, and for demurrage, $360. Exceptions were taken to the commissioner's report by Patrick Smith, owner of the tug, on the ground that the amount allowed for repairs to the stern of the Davis was excessive because she was in a rotten and decayed and unsound condition, and he should not be compelled to make her stern as good as new. The court however, confirmed the report of the commissioner and rendered a decree accordingly. The case was appealed and Judge Baxter, in the Circuit Court, affirmed the decree of the District Court.

BUFFALO.

Special to the Marine Record.

The MARINE RECORD can be found for sale at Mr. C. Rohmer's news stand, near Michigan swing bridge.

The Western Transportation Co.'s steamer Arabia is having her upper works rebuilt and boilers repaired.

David Bell is building an iron tug with iron beams, plankshear and bulwarks, 77 feet long, 16 feet beam, 9 feet hold: engine, 20x 22½; boiler, 13 feet long, 7 feet diameter, to carry high steam.

Samuel Gibson, shipbuilder, is building for John E. McIntyre, a steam yacht 60 feet long, 12 feet beam, 5 feet hold; engine 10x10; boiler of Otis steel 6½ feet long, 4 feet diameter. He is giving the tug Newsboy a thorough rebuild and the tug Fulton, a thorough overhauling.

George H. Notter, ship and boat builder, is building for A. Chesborough, of Toledo a tug 66 feet long, 15 feet beam, 7½ feet hold; engine, 16x18; boiler, 11 feet long, 6 feet diameter. Also two canal boats and consorts for use on the Erie canal.

Captain Case is here from Marine City and is salting down and having some necessary repairs done on the schooner Sweetheart. She has been chartered by Morley & Morse, of Cleveland, to the Menominee Company for six trips to carry iron ore from Escanaba to Ohio ports at $1.10 per ton, and coal back at going rates.

Sutton Brothers, Le Couteul street engineers and boiler makers, are building an engine 10x10 and boiler 6½ feet long, 4 feet diameter for the steam yacht building by Samuel Gibson; an engine 10x12, boiler 7½ feet long, 3 feet 10 inches diameter, for the steamyacht building by Joseph Supple; an engine 18x20 for a steambarge building at Lorain, Ohio, owned by Thew Chapman & Co.; an engine 16x20 for a tug owned by Thos. M. Hubbell, of Detroit; an engine 9x9, boiler 3 feet 8 inches, for a fishing boat owned by E. D. Carter, of Erie. They will also put the machinery into the new tug building by O'Grady & Meagher for Captain Thos. Maytham.

Inspector Dickson Hearmonth's decision in the case of the propeller Fred Mercur is considered a very just one by the vessel men here, none of whom are sorry that some of Captain Fred Pope's enemies have received their reward. The full text of the decision is as follows:

OFFICE OF U. S.
LOCAL INSPECTORS OF STEAM VESSELS
BUFFALO, N. Y., Feb. 20, 1884.

We the undersigned, United States local inspectors of steam vessels, Buffalo, N. Y., find in investigating the cause of the stranding of the steamship Fred Mercur on Erie peninsula, Pa., while endeavoring to make the harbor of Erie, on the afternoon of November 15, 1883, during a heavy wind and snow storm, and after carefully considering the testimony taken, find the cause of the stranding was owing to the neglect of Mate Peter A. McKinnon and Second Mate Wm. McCullom in not reporting soundings to Captain Pope, who was at his post of duty on the pilot house directing the movements of the steamer. We further find that Captain Pope was at his post directing the movements of the steamer previous to turning round for Erie harbor, and from that time up to the time of stranding, and we exonerate him from blame. We therefore revoke the license of Peter A. McKinnon as first-class pilot and mate, and we suspend for six months the license of Wm. McCullom, second-class pilot, for gross neglect of duty as pilots in not reporting soundings to Captain Pope, of the steamship Fred Mercur, while attempting to enter the harbor of Erie, Pa., on the noon of November 15, 1883.

GEORGE B. DICKSON,
ROBERT LEARMONTH,
Local Inspectors Steam Vessels.

OSWEGO.

Captain James Savage of Wellington, Ont., has purchased the schooner Agnes Hope of Port Hope.

John Richards of Picton has completed a model of a light pressure boiler and will apply for a patent for it.

John Elkin and Thos. Bates, the divers who went from this city to endeavor to recover the bodies of three victims of the late railroad disaster at Weedsport on the Southern Central road returned without having recovered the objects of their search. Probably the bodies of the unfortunate men were swept under the ice.

DETROIT.

Special to the Marine Record.

DETROIT, February 26.

From the St. Clair ship canal throughout to Bar Point, Lake Erie, navigation is unimpeded, and a few more days of mild weather will enable a steamer to reach as far as Algonac, on the St. Clair river. This unlooked-for event may possibly arise before a steamer will be in readiness to make the trip, and yet another cold snap would change the program, though hardly probable.

The ice embargo at Grand Haven, from advices just received, seems as obstinate as at any time during the present winter. The propeller Wisconsin lies blockaded one mile distant from Grand Haven and her consort, the Michigan, four miles out, both having full cargoes of east-bound freight. A change of wind is necessary before they can be released. Passengers and others desirous of reaching terra firma came ashore on the ice. No water is visible as far as the eye can extend.

Murphy Bros., of this city, will be prepared with eight first-class steamers for the towing and wrecking business the coming season, composed of the following named boats: Balize, W. A. Moore, Gladiator, Kate Moffat, Kate Williams, Andrew J. Smith, Charles Kellogg and Michigan.

Captain Boynton, of the steamer Algomah, which has been frozen in at the Straits nearly all winter, reports progress and that there is a probability of her release and reaching her dock in about ten days, which will bring it to the month of March, or in the spring time of the season. She is being moved about 200 feet in twenty-four hours through ice and snow, the latter being about two and a half feet deep and almost as great an impediment as the former. That some strategy must be devised toward crossing this channel during the winter term in the future there is no chance for argument and the issue is only a question of time.

Messrs. Merick & Castleton are having thorough repairs laid out among several vessels of their fleet, which includes the schooners M. F. Merick, Montgomery and Monterey, which will be done at the ports of Ashtabula and Cleveland, where they were laid up in the fall.

The work of placing the schooner Benedict in sea-going shape has commenced under the supervision of Captain J. B. Malott, who is joint owner with Captain D. Webster.

James P. Donaldson & Co., have had prepared a draft for a schooner-rigged sailing yacht, which will be by them carried out to completion as regards all the material. She will be 52 feet keel, 20 feet beam, and 7 feet depth. From the drawings shown me she will be of handsome model and a fast sailer. She will be owned by Henry C. Hart, Esq., of this city.

J. R. Gillett is desirous of retiring from the tug business and to that end will dispose of the tugs he has on hand as soon as possible.

The wharves and piers variously located on Pidgeon Bay are being rebuilt and prepared for business ere the time for shipping commences in the spring.

A well executed marine painting is on exhibition here in the window of one of our prominent jewelry houses which has called forth much praise from experts in that line. It represents a yacht coming head on with

[*Continued on 5th page*].

MARINE LAW.

LIABILITY OF SHIPOWNERS.

Superior Court.—New York. General Term.

Sedgewick, C. J.: Truax and O'Gorman, J. John Paterson respondent, against John Swan, appellant.

Appeal by defendant from interlocutory judgment in favor of plaintiff entered upon an order sustaining plantiff's demurrer to a part of an answer that pleaded a non-joiner of certain parties who it was claimed, should have been made defendants.

The plaintiff sued the defendant, as owner of a vessel on which he shipped as seaman, for damages for the alleged wrongful acts of the master in compelling him to do ordinary work of a seaman when his injuries had unfitted him to do them. The answer averred that there were other owners, and named them.

Held. That plaintiff's demurrer to the answer was properly sustained.

Sedgewick, C. J.—The complaint charges that the plaintiff was employed as a seaman on a bark for a voyage to Java and back; that while on the voyage he was thrown upon the deck by reason of a sea striking the vessel, there from receiving injuries to his body, and especially his arm; that the master proceeded to treat him for his injuries, but "negligently and carelessly treated and used the arm and hand of plaintiff, and carelessly and negligently and wrongfully applied medicines, and bandages and other appliances to the wounds and injuries of the plaintiff; that by reason of the said negligence and the insufficient and defective supply of medicines the plaintiff's hand and arm became worse so that when the vessel arrived at Batavia, in the Island of Java, the same had become seriously diseased and in a highly dangerous and inflamed condition; that the master detained the plaintiff on board and wrongfully neglected and carelessly refused to allow him and prevented him from being treated by competent physicians and surgeons at Batavia; that subsequently upon the further prosecution of the voyage back plaintiff was disabled and unable to do duty, and without any fault or negligence on his part, but nevertheless while so disabled and while his injuries were increasing by reason of said negligent, careless and wrongful conduct of said master, the said master ordered and compelled plaintiff to perform duty as a seaman, which for the said reasons he was totally unable to perform without great injury to his health and body, and which aggravated the said injuries and prevented him from getting cured and causing him by the reason of the said conduct to be mained for life." The complaint charged that the defendant was owner and employed the master, but the answer in the defense demurred to, and, therefore, admitted to be true in point of fact, averred that there were other owners, and named them.

The appellant's counsel claims that the complaint does not state a cause of action. In Parsons on Maritime Law (vol. 1,456 the law, upon the cases cited in a note, is said to be that "there is, by the general law merchant, an obligation upon every shipowner or master to provide for a seaman who becomes sick or wounded or maimed in the discharge of his duty, whether at home or abroad, at sea or on land, if it be not by his own fault, suitable care, medicines including, nursing, diet and lodging. At first it was held that the statute requiring a medicine chest substituted the requirement for the new general requirement of law, but it may be douted if this is so in any degree, and it seems to be settled that the general obligation of the law merchant remains in force unless the medicine chest is provided with medicines and means of medical treatment which the particular case requires, and there is sufficient skill on board to make a proper use of those medicines."

The master was the agent of the owners to perform the obligation that has been described. It was their duty to use through him suitable cure. If for sufficient reason he should decline or omit to treat the seaman in any active way, he might be justified in that, but he could not lawfully treat him in a negligent manner. If he did as the complaint charges, it was negligence in an act within the scope of his employment, for which the employers, the owners, were liable. This may be applied to compelling the plaintiff to do the ordinary work of a seaman when his injuries had unfitted him to do them without making his state of body worse. This would not necessarily be a wilful act; it might be inconsiderate or negligent. If it were wilful, it might still characterize an act which was within the scope of the employment.

The duty violated was not one enjoined by the contract of shipping as a seaman. It had its existence outside of that contract, and would have been the same if the defendant was a seaman with duties to the masters and owners by virtue of a contract made with a third party. It had regard to the part of the relations of owner master and seaman. For this reason, if for no other, the demurrer to the answer that pleaded in abatement that pleaded in abatement that there were owners besides the defendant, and naming them, was properly sustained. Chitty in Pleading (87; gives the rule which is also given (1 Saunders, 291,) "where an action in the case brought merely for the non-feasance of a contract, and in order to support the action a contract must be proved, and is the basis of the suit (as in case for a breach of warranty on a sail, etc.,) the joinder of too many defendants will be a ground of non-suit, and it should seem that if a joint contractor be not included, the defendant may plead his non-joinder in abatement, for it is not competent for the plaintiff in such an instance to alter or obviate the rules of law with regard to the parties to be sued on a contract merely by varying the form of his action, when, in substance, it is founded on the agreement. But it must appear from the declaration that the gist of the action is a breach of contract. And with regard to carriers and innkeepers as their liability is founded on the breach of an implied common law duty of their particular capacities if they sued in case for negligence no valid objection can be made in respect to the non-joinder of a party (Roberts v. Johnson, 59 N. Y., 615) followed this rule." In the present case the duty is applied by the law merchant, irrespective of the provisions of the shipping articles. The terms of the latter, however, do not appear upon the record.

The parties to the appeal have not raised the question as to whether that which is appealed from is an interlocutory judgment. From the hearing of the appeal it is not to be deemed that any opinion is implied that it is.

Interlocutory judgment affirmed, with costs.

Joseph A. Shoudy for appellant; George H. Hart for respondent.—*Maritime Register.*

THE EFFECT OF OIL.

To the Editor of the Marine Record:

CLEVELAND, O., February 18.

I notice in your paper an article from the New York Mail entiled "Oil on the troubled waters." It is true a heavy swell never sunk a ship so long as the swell kept whole, but it is the broken sea that does the damage, and as I have been a sea-faring man all my life, I have had a little experience in this direction and I know that if you throw oil on the water where it is deep, say from eleven fathoms up, you have the desired effect. But I take from the writer's suggestion on the wreck of the City of Columbus, he might just as well spit on the water as to throw oil where waves break on rocks and shoals and in such a terrible gale as raged when the Columbus was lost. For wherever there is a shoal or a reef of rocks, some two fathoms and some five, you might have a sea of oil and still the waves would break if it is blowing hard, for the force of the wave coming in on the shallow water rises so steep that it is bound to break. Now you must not compare the waves you see breaking on the lake shore with the waves on the Atlantic. I might say a great deal on this subject but I will not at present. However, one or two facts I would like to mention. I have seen many times the great mountainous waves roll in from the Atlantic from fifty to seventy feet high and break with such force on rocks and shoals, seven and ten fathoms deep, as to tear off seaweed and shell fish from the bottom in heaps. I have also seen these waves break on the shore at the base of cliffs five and six hundred feet high and go clear over the top of those cliffs in a white cloud. So you can have an idea what effect oil would have on those waves. SEAMAN.

It is reported that a new boat will be put on the lake shore route.

GENERAL NEWS.

The Florida Ship canal project is in the hands of a new company, which proposes to absorb the old companies and start all over again.

The American Shipbuilding Company has reduced its capital stock from $750,000 to $300,000. The company has a great deal of work on hand and expects several new contracts.

William Watts, watchman of the steamer Warren, at Chattanooga, and a deck hand quarreled. Both fell into the river and were drowned.

Oliver Edes, originator of the vast industry of machine rivet making in this country, died at his home, Plymouth, Mass., of Bright's disease, aged sixty-nine.

Commander Goodrich leaves the Thetis, recently purchased by America for the Greely relief expedition, and takes command of the Alert, the sloop of war which the English Government adds to the expedition. The Thetis sails for America next week.

Mr. Houseman received a letter from W. O. Hughart, president of the Grand Rapids & Indiana railroad, also one from District Attorney Stone, of Grand Rapids, with reference to securing an appropriation for establishing a breakwater at Mackinaw City. The importance of this work is clearly set forth in these two letters. Mr. Hatch will offer a bill making the desired appropriation. The principal object at present is to have the work approved by the board of engineers and operations commenced.

A meeting of the directors of the White Star Line of boats was held in Detroit recently. The following directors were present: Henry Howard, A. N. Moffat, C. A. Ward, of Port Huron; W. K. Muir, of Detroit, and Mark Hopkins, of St. Clair. The first three named were elected president, secretary and treasurer, respectively. This company will run the Idlewild and Evening Star on the river route the same as last season. There is some talk of building a new boat for this line but it has not assumed definite shape. This much is certain that nothing will be done in that direction before next winter.

Steam boilers are usually provided with a glass tube connected with the boiler in such a manner as to show the height of the water within. Being heated intensely by the water within, they frequently crack if a draught of cold air strikes them from without. This may be prevented, says the Industrie Blatter, by using two concentric glass tubes. Between the inner and the outer tubes an elastic strata of air is imprisoned that protects the inner one from draughts, the outer one from heated water. Both tubes are packed at each end in brass couplings that connect with the boiler, and both form but a single instrument.

It is understood that Messrs. Henderson Brothers have arranged to run the steamer Austral in connection with their big ship, the City of Rome, in the Liverpool service of the Anchor Line, during the coming summer season. The Austral is a comparatively new vessel, built in 1882, of 5,588 tons; her dimensions being: Length, 456 feet; breadth, 48 feet 3 inches; depth, 34 feet. She has engines of one thousand horse-power, and is expected to make the voyage between Queenstown and New York within the seven days, and will therefore be a fitting consort to the City of Rome. The Austral has received an extensive overhaul and is in splendid condition.

During the approaching season of navigation the fleet of ocean steamers trading with Montreal will be increased, perhaps more than during any preceeding one. To the fleets of the regular lines seven steamers will be added with an aggregate tonnage of 32,200. The Allen line, which already has two large steamers building to be launched during the summer, has given the order for another, and the other lines with vessels ordered are pushing the builders to get them afloat. During the summer, the Allen line will launch the Immidian, 6,100 tons; the Siberian and Carthagenian, 4,600 tons each. The Beaver line will add to their fleet the Lake Superior, 5,200 tons; and the Dominion line the Vancouver, of 5,700 tons. This vessel will be an improved second edition of the Inman Line's City of Chicago. The Thomson Line plying between Montreal and Liverpool, are getting built two steamers of 3,000 tons each.

LOSS OF LIFE AND TREASURE.

Special Correspondence Marine Record.

DETROIT, February 25.

Were it possible to drain or lay bare the western lakes the exhibit of engines which, from the beginning to the present era have gone down with their hulls, would be marvellous and exceed ten millions of dollars. This summary of lost machinery does not include those which have been broken up, stranded or wrecked, but simply such as have disappeard and were never seen afterward, occasioned either by fire, foundering, or having been sunk by collision, and only in one instance stranding, which was the steamer George Washington on Lake Erie in 1833. Of the number of such losses sixty-five were sidewheel steamers and 121 propellers or tugs, which, in a few instances, instantly disappeared by explosions, and in all a total loss of 2,941 lives. Lake Michigan shows up a record by the loss of eighteen sidewheel steamers, thirty-eight propellers and 1,037 lives, 625 of which number were lost on the first named boats. Lake Erie presents an exhibit of twenty-two sidewheelers and thirty-two propellers; 846 lives from the former and 137 from the latter. Seventeen sidewheelers were lost on Lake Huron and twenty four propellers, occasioning a loss of 94 lives from the former and 259 from the latter. On Lake Superior, five sidewheel and six screw boats, with a total loss of 83 lives, disappeared. Those of Lake Ontario were not so great as on the other waters, when a comparison is drawn, being only two sidewheel losses and eleven propellers, with 169 lives. The lost engines on the Detroit and St. Clair rivers were occasioned, with one exception, by explosions. Georgian Bay, which, aside from Lake St. Clair, is the smallest of all the other basins, being ouly 130 miles long and 55 miles broad shows up a bad record, and in a violent gale, with the wind in the right quarter, gets up a more spiteful sea than most of the others. It is only within a recent period that there has been much of any traffic in that direction. Yet within a very few years one sidewheel boat was engulfed in those waters, and five propellers, and 257 lives were lost, no less than 120 going down on one steamer. Two of the most serious casualties occuring on Lake Michigan, was the burning of the propeller Phœnix in 1846 with 190 lives, and the sinking of the Lady Elgin in September, 1860, with 388 lives. Lake Erie occupies a prominent place for noted disasters and had more of a like character than any of the others, having been earlier traversed. The record shows that on this lake occurred the first explosion and the most alarming fires, two of which can rarely be found on record; The fine steamer Erie, August 4, 1841, was enveloped suddenly in flames, off Silver Creek, and in a few moments 250 lives had passed out of time, meeting the most horrible of deaths. The steamer G. P. Griffith met a like fate off Chagrin, June, 1850, and inside the space of twenty minutes 325 lives had succumbed to the fiery demon.

J. W. H.

UNSUBMERGABLE LIFEBOAT.

Special Correspondence of the Marine Record.

BUFFALO, February 25.

D. P. Dobbins, superintendent of this life saving district, sent last week to the Shark river life saving station, on the coast of New Jersey, a very handsome new lifeboat 24 feet long, 6½ feet beam, 2 feet 2 inches deep, fitted for carrying twenty-six persons regardless of the weather. She is sharp at both ends, and is an unsubmergable, self-righting and self-bailing boat. Her hull weighs 1,050 pounds. She is ballasted with 450 pounds of cork which fills her entire hold. Her turtle-back air cases at each end are fitted for the conveyance of invalids, women or children free from exposure in stormy weather. She was built by Wm. Hingston & Son, yacht and boat builders, Buffalo, from designs by D. P. Dobbins. Superintendent Dobbins intends to have similar lifeboats built for the life saving stations in his district, which comprises Lake Erie, Lake Ontario and the Ohio river.

T. W.

The Morrison bill, as it now stands, puts iron ore on the free list. There is high authority for the statement that the committee will withdraw iron ore from the free list and subject the article to the horizontal reduction of twenty per cent applied to the metal schedule.

LITERARY NOTICES.

HARPER'S MAGAZINE for March does not contain a single article in its varied contents that has not a strong claim upon the attention of readers, and its illustrations are superb. The frontispiece engraving is an illustration of the third part of William Black's new novel, "Judith Shakespeare," from a drawing by E. A. Abbey. The opening article is a description of St. Louis by, William Henry Bishop, splendidly illustrated. This is followed by a descriptive article, entitled "The Yorkshire Coast," by William H. Rideing, picturesquely illustrated by Harry Fenn. The fourth part of E. P. Roe's popular novel, "Nature's Serial Story," discloses the intelligent farmer's winter fireside, with its social and intellectual attractions. Colonel Higginson's American History serial grows more and more interesting now that the Colonial and Revolutionary periods are passed. This month's paper "The Early American Presidents," is especially novel and interesting. There are two articles of distinctively literary interest—Dr. E. M. Gallaudet's paper on "The Poetry of the Deaf," and a sketch of Will Carlton, biographical and critical, by J. T. Trowbridge, with a fine portrait of the popular author of "Farm Legends." Dr. Gallaudet's article is illustrated by six portraits. Charles Reade contributes the first part of a short story entitled "The Picture;" J. R. Tait, the landscape artist, contributes a general study. "The Old Town-Councillor;" and a short story entitled "Love is not Enough" is from the pen of the late William M. Baker. The poems of the number are all noticeable. Will Wallace Harney contributes an article of timely interest on "The Drainage of the Everglades," illustrated by maps. Mr. George William Curtis in the Easy Chair discourse upon the "elevation" of Mr. Tennyson, private lives of public men, Margaret Fuller, and the opera season in New York. The Literary Record is full of able and valuable reviews of new books.

THE MARCH CENTURY.—Von Moltke's portrait, which is a fine frontispiece, and the character portrait of Irving as Hamlet, lend a personal interest to the March Century. Each accompanies a striking article; Miss Helen Zimmern tells the remarkable story of the life of "Count Von Moltke" with anecdotal interest, and J. Ranken Towse contributes a pointed estimate of Henry Irving's dramatic art. The paper on "The Next Presidency," by ex-Attorney General Wayne MacVeagh, is a powerful analysis of the political situation, and a cutting satire on the men who are responsible for abuses which await the reforming hand of the kind of President Mr. MacVeagh delineates. Another important essay, by D. McG. Means, discusses methods for "The Suppression of Pauperism." And here it is appropriate to mention the subjects discussed in "Topics of the Time," which are: "A Chinese Wall for American Art," "The Christian League of Connecticut," American Copyright League"; while in "Open Letters" the Rev. Dr. Charles S. Robinson continues his suggestive and humorous critism of Church music, J. B. Peterson writes of "National Aid to Education," J. C. Schaffer of "Suggestions Regarding Temperance Work," Mary B Willard of "High License," S. K. Strother of "Prohibition in Kansas"; and the anonymous author of "The Bread-winners" replies forcibly and sarcastically to strictures upon his story. In their order, the illustrated papers are an interesting description of "The New Washington," considered both in its material and social aspects. Richard Grant White writes, with his usual pith, about "Old Public Buildings in America," and the pictures explain as well as embellish. The second paper of Mr. Benjamin's "Cruise of the Alice May" deals with the South-west coast of the Gulf of St. Lawrence, as far north as Cape Gaspe. Miss Sarah Freeman Clark's first half of her "Notes on the Exile of Dante" is illustrated by Harry Fenn, after sketches by the writer. John Burroughs describes in a delightful way, "A Hunt for the Nightingale" in England. The fiction of the number includes the fourth part of Robert Grant's "An Average Man," the fifth of Mr. Cable's "Dr. Sevier," and a short story, by Octave Thanet, dealing with social prejudices in a Western city and entitled "Mrs. Finlay's Elizabethan Chair." The poems are by Sidney Lanier, John Vance Cheney, James Herbert Morse, Hamilton Aide, Rose Hawthorne Lathrop, Helen Gray Cone, Frank Dempster Sherman, and others.

LAKE YACHTING ASSOCIATION.

The Oswego yacht club held a meeting at the Doolittle House last evening for the purpose of taking action on the movement which has been started by the Toronto yacht club for a Lake Ontario association with a uniform set of rules and code of signals. The proposition is regarded with favor by yachtsmen generally and in the meeting last evening the opinion was freely expressed that if the plan could be made to work it would be a good thing. In order to further the designs of those having the matter in charge, Commodore John T. Mott and Vice Commodore W. B. Phelps, jr., were appointed a committee to attend the convention when it shall be called, giving them power to act for the Oswego yacht club to the fullest extent. The convention will probably be held in Toronto.—*Times, February 12th.*

On the authority of a lady in Washington, J. R. Randall relates the following: "A master machinist every now and then fancies he is a boiler, and about to burst. He throws himself prone upon the floor, and insists upon his family drenching him with cold water. They always humor him. When about half drowned his right senses return, and, to all intents and purposes, for weeks at a time, he is a sober, clear-headed, money-making, business man," He is probably a bloated bondholder.

Captain Ira F. Holt writes that the crews of the R. G. Stewart and Dove will return to Duluth the latter part of the month.—*Times.*

AMERICAN SHIP WINDLASS CO.

The American Ship Windlass Co. will furnish the following windlasses:

For English steamer Vertummes, at New York, a Providence steam pump brake windlass, to replace the English windlass now in use.

For schooner H. H. Brown, a Providence capstan windlass to replace a Coffin & Woodward windlass now on board.

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For two schooners building by Goss, Sawyer & Packard, of Bath, Me., for Messrs. Church, of Taunton, Mass., the Providence pump brake windlasses.

For the five steamers building by Pusey, Jones & Co., Wilmington, Del., for South American parties, the Providence flush deck capstan windlasses.

Notwithstanding the dull times the Windlass Co. have more than their usual orders for this time of year. Their windlasses have always given satisfaction wherever they have been used, and owners, masters and builders feel satisfied when ordering these machines or calling for them in their contracts, that they will get a good article and one *free from all infringements.—Nautical Gazette.*

FOR SALE,

A Fine Harbor Tug.

Dimensions of hull 65 feet over all, 16 feet beam, 8 feet hold, and measures 46 tons with 7 feet draft; can be made 6 feet draft. The engine, 18x20, is in first-class condition, with all new brasses, new rings in cylinder and turns a six-foot wheel, which was new last season. The boiler is one year old, is large enough to burn wood or coal and is allowed 100 pounds of steam. Price $4,600, and must be sold inside of sixty days. Address MARINE RECORD OFFICE.

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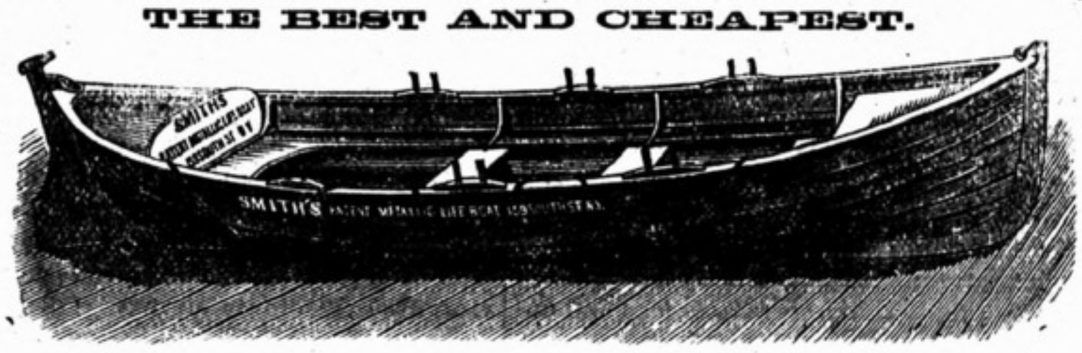

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SECOND HAND TUBULAR BOILER, 44 inches diameter, 43 tubes 3 inches diameter and 12 feet long, steam drum 30 inches diameter, 40 inches high; front grates, fittings and breechings; good order.

SECOND HAND MARINE BOILER, in good order; Shell, 7-16 inch iron plate; diameter, 9 feet 6 inches, length, 18 feet; 129 tubes 4 inches in diameter, 11 feet 4 inches long, three flues 18 inches diameter; two flues 16 inches diameter, two flues 10 1-2 inches diameter; fire box, 6 feet long, 4 feet high; steam chimney, 7 feet high.

SECOND HAND MARINE BOILER four feet wide, 6 1-2 feet long, 5 feet high, sixty-four 2 1-2 inch tubes 60 inches long, cast iron breeching, good as new.

SECOND HAND MARINE ENGINE; double direct-acting 8x8 inch cylinder, shaft and wheel for yacht or tug; good as new.

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The Marine Record.

Entered according to the laws of the United States at the Post Office at Cleveland as second-class matter.

Published weekly at No. 2 South Water street, Cleveland, Ohio.

A. A. POMEROY, Editor and Proprietor.

TERMS OF SUBSCRIPTION:

One year, postage paid.....$2.00
Six months, postage paid..... 1.00

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Articles, letters and queries on all subjects are solicited.

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To insure notice, contributors must give name and address, and write on one side of the paper only.

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ADVERTISING RATES.

Ten cents per line, nonpareil measurement, or $1.20 per inch, each insertion; four weeks $4.00; with a liberal discount on orders amounting to $40.00 or over.

It is said that it costs $200 to load and unload one of the Detroit and Milwaukee boats at Grand Haven.

The United States fish commissioners deposited 42,000,000 young whitefish in Lake Michigan, near the mouth of the river at Manistee, last week.

Messrs. Wheeler & Crane's yard at Bay City has the uninviting appearance which indicates active shipbuilding business. They are pushing along two new boats with admirable rapidity.

An administrator has been appointed for the estate of Captain John McKay, and his wife has bought his interest in the boats Sam Fifield, Agate and Bob Inglis. The Agate will be re-named after Captain McKay's son, John McKay, Jr., as soon as the necessary consent of the secretary of the treasury can be obtained.

A suit has been brought in Detroit by Captain McKay, of West Bay City, against Captain Meisel, of Detroit, to recover the value of the barge William Treat, which parted her tow lines in a gale on Lake Huron last season. It is claimed that Captain Meisel, who was master of the tug J. P. Clark at the time, and who had charge of the tow, did not take any steps to recover the barge after she broke adrift.

Representative Foran, probably thinking there are not sufficient burdens on American shipping and shipbuilding, does not hesitate to introduce a bill in Congress, the text of which we gave last week, imposing an additional number of petty means of retarding the growth and prosperity of the interest. The bill has not even the merit of being original and will not gain much glory for the author. Vessel owners should take vigorous and immediate steps to defeat it.

Canada's railroad projects, when they are directed against the fleux of trade and traffic toward the middle belt of the United States are quite impractical. The Hudson Bay railroad is a pet scheme of the Manitobans, and its frequent introduction into the Dominion Parliament shows that there is a hopeful spirit nearer the seat of government. To build the road from Winnipeg to Fort Churchill, a distance of 700 miles, would cost a matter of $22,000,000, which would necessitate a government subsidy. That would lead to a bay navigable only between June 15 and September 15, and which is invaded by icebergs at all seasons of the year, and the gain would only be to give an advantage of eighty miles over the New York route to Liverpool. It is made a strong point that the difference between Chicago and New York might be saved to the transporter, but this would apply to producers who would find a market in Chicago.

SHIPS FOR THE SEA—SCARCITY OF LAKE CARRIERS.

From various reports it is quite evident that some of the shipbuilders are not going to wait very long for the bounty measure now pending in Congress. The industry has taken a sudden impetus for some reason quite unexplained. The Philadelphia papers say that at the four upper yards in that city nearly twenty-seven hundred men are employed and all is bustle and activity. Among the vessels being built are four iron steamships an iron sailing ship, a three-masted iron schooner, an iron steam collier, and an iron steam float 160 feet long, 60 feet wide and 6 feet deep, to be covered in and adapted as a refrigerator and designed to carry dressed beef to ships in New York harbor. In all this there is an encouraging consumption of iron. With the use of this material shipbuilding becomes a wheel within a wheel to set the water carriers into doubly increased activity, enlivening the ore trade and the furnaces at the same time. And in this connection comes the news of the inauguration of a new era in shipbuilding on the banks of the Kennebec. Two prominent firms of Bath, Me., have united with some capitalists of that city in forming a joint stock company, with a capital of $50,000, with the intention of carrying on the business of shipbuilding there on a larger scale than ever before. They already have contracts to build to the amount of more than $300,000 and they expect to be able to secure sufficient capital for the equipment of an iron shipyard. These evidences of revival are exceedingly gratifying.

On the other hand a review of the facts in the case do not warrant any rose-colored statements concerning the prosperity of this industry the present winter in Cleveland. It is probable that shipbuilders do not wish to cherish any such delusion. The shipbuilding trade is like all others, as it is regulated by the law of supply and demand, and the smaller amount of tonnage there is afloat the more profit there will be for that remaining. On the other hand there is a large class of people concerned in this industry, including the shipbuilders, shippers, vessel and tug owners, brokers, sailors, furnishers and others, making up a small army, who are dependent upon a goodly number of vessels for a livelihood, that will be disposed to take a more gloomy view of the apparent quiescent state of shipbuilding. The business-like way to look at the matter is to inquire who are to be the losers. The labor that is likely to be affected by a multitude of ships, particularly of sailors, has of late years become so much demoralized that it would be better for those following it if they should engage in something else. Steam is fast numbering the days of the fresh water sailors. They do not enter into the present calculation. In looking over the ground in this city we find one new steambarge in course of construction at Quayle's shipyard for Captain Thomas Wilson and a consort which will probably be ready to go with her; also an iron steamship, being built by the Globe Shipbuilding Company for Cleveland parties, and a large barge at Mr. Radcliffe's yard for Wallace Brothers, Gawn and others, besides several smaller vessels. The first named will be ready for work by the opening of navigation, the others to be finished later in the season. There is much old work being done in the way of repairs, and several sailing craft are being transformed into steamers, which evidences an inclination against investing largely in new ships. The present activity at the shipyards on old work is due to the unusual violence of the storms on the lakes during the last days of navigation of the season just closed, a great number of vessels sustaining more or less damage, which rendered immediate repairs necessary. Considering the large quantity of grain, ore, coal and merchandise to be moved the coming season, and the apparent scarcity of ships, rates will probably rule firmer and higher than for some years.

THE IRON AND STEEL MEN.

The iron and steel interests are found by the ways and means committee to be the hardest things to reconcile with Morrison's tariff bill. Last week we called attention to the fact that the iron and steel lords of the country were before the committee protesting against the tariff and posting its members on various points pertaining to the matter. One of the members of the committee, Mr. Hewett, of New York, is said to have been actively engaged for many years in mining, manufacturing, importing and in other branches of the industry, and might be credited with a pretty thorough knowledge of the subject. He asked some very pertinent questions one day last week of John Wharton, of the Bessemer Steel Association, of Philadelphia, one of them being whether he could not make cheaper steel if he had free iron ore. Wharton replied in the affirmative, and admitted finally, that after a thorough examination of the ores of this country, he was now importing ores from Cuba for making steel. Mr. Ely, of Cleveland, took issue with Mr. Wharton, and himself came under cross-examination by Mr. Hewett. In him Mr. Hewett found a different customer. He evidently endeavored to make Mr. Ely admit that the Lake Superior mines have seen their greatest prosperity under the low duty on iron prior to the passage of the last tariff act, and that their development took place side by side with free ore. Mr. Ely said that the Lake Superior mines developed under the first impetus of manufacture incident to the time which was quite disconnected with the competition of free ore, and if a depression existed now its cause must be sought for in an opposite state of iron manufacture and laws of demand equally foreign to the operation of the tariff law. Mr. Van Dyke, of Milwaukee, vice-president of the Menominee Mining Company, also took side against Mr. Wharton's views regarding the introduction of foreign ore. Messrs. John Roach and Wayne McVeagh, of Philadelphia, both made speeches before the ways and means committee. Mr. Roach believed firmly in the expediency of keeping a heavy duty on imported ore. As he speaks from experience and a general knowledge of the navigation interest his views are certainly entitled to considerable weight. Mr. MacVeagh is of like opinion with Mr. Roach. He, however, carried his remarks to still greater lengths, and protested strongly against all tariff legislation.

BRILLIANCY OF THE LIGHT-HOUSE BOARD AT ERIE.

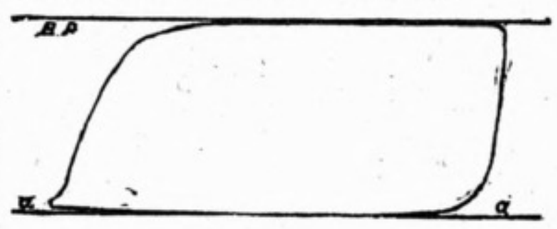
Congressmon Brainerd, who arrived in Erie from Washington on the 23d in, commenting on the probable action of Congress said he confidently believed it would reestablish the Erie land lighthouse. It is also probable that Mr. Brainerd has thwarted another outrage on Erie, much more fatal to her interests than the destruction of the land lighthouse, which had guided mariners into the bay more than seventy years. The stupid officials of the lighthouse board actually issued an order to cut down the trees on the peninsula of Presque Isle opposite that city, their reason for such a remarkable proceeding being that their foliage prevented lake captains on the north shore of the peninsula from seeing the harbor lights. Having committed one piece of folly, they would remedy it by the perpetration of a blunder still more inexcusable. The land beacon, standing about one hundred and sixty feet above the water level, could be seen from any part of Lake Erie, but of course the low lights in the channel piers cannot be sighted north of the peninsula on account of the heavy growth of timber. With the land light burning it is not necessary, as they are intended only to guide vessels through the channel. Instead of acceding to the forcibly expressed wishes of every Erie citizen and lake navigator, and restoring the dismantled beacon, the lighthouse board ordered the removal of the trees, in order that the insignificant lights now remaining might be discernable across the Peninsula. These trees were planted for the protection of the Peninsula against the inroads of the waves, and their growth has always been a matter of local pride. The government has expended hundreds of thousands of dollars in preserving the Peninsula, without which Erie would cease to be a harbor, and yet these gentlemen of the lighthouse board, who certainly did not know the value of these trees as a landmark to navigators on a dark night would, with a stroke of the pen, undo all that has been done at the cost of so much money and so many years of labor. It is evident to everybody but imbeciles and members of the lighthouse board that their removal would be followed by the complete washing away to the peninsula, as they alone bind the narrow strip of land. Congressman Brainerd presented the consequence of the proposed outrage to the board, and convinced even that body of stiffnecked noodles of the irreparable damage they were about to inflict on Erie, the indignant remonstrance of his constituents materially assisting. The order has been rescinded.

PATENT ENGINE.

Editor of the Marine Record.

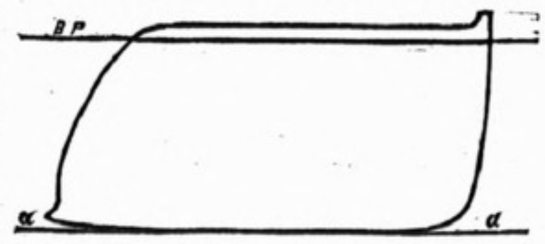
Since the days of Watt the improvements of the steam engine have been the constant study of engineers, and scientists as well, and strange to say, most of the signal improvements have not been the result of the study of engineers. The early history of the steam engine informs us that the principal improvements were made by an architect, a physician, a chemist, etc., and the improvements to which I shall call the attention of your readers, (and which, by the way, I will venture to say, are equal to the improvements made by applying the compound cylinder,) are not the result of the study of an engineer but the result of the active brain of a Cleveland inventor. The impossibility of attaining a pressure on the piston of a steam engine when in operation equal to that in the boiler has long been known. It is well known that for a number of years efforts have been made to attain a pressure upon the piston equal to that on the boiler without success but I can say there is an engine so constructed with two steam-chests placed on opposite sides of the cylinder, and furnished with a double valve motion, the valves being of the slide valve variety, and set so that both open for the admission of steam at the same time. The result of an experiment made February 23 shows the pressure on the piston to be four pounds per square inch above the boiler pressure. The steam pipes were so arrainged that either side could be shut off and the engine be allowed to run with only one valve in operation.

The annexed diagram No. 1. was taken when but one side was in operation with a boiler pressure of 65 pounds, and shows an initial pressure of 64 pounds and an average of 58¼ pounds, which is very good.



NO. ONE.

The next trial produced card No. 2, which was taken with a boiler pressure of 65 pounds to the square inch and both valves in operation and shows an initial pressure of 75½ pounds to the square inch on the piston and an average pressure through the stroke of 4 pounds above the boiler pressure or a gain of 5.74 pounds over diagram No. 1, with



NO. TWO.

no difference in back pressure. The speed of the engine was taken at the time the diagrams were by Taylor's patent speed indicator, and was found to increase forty revolutions per minute when both valves were in operation compared with the speed indicated when only one valve was in operation, making a difference of two horse power. Where steam is worked expansively, as in marine engines, the economy to be derived by this improvement can readily be seen. By attaining a pressure on the piston above that in the boiler the steam can be cut off earlier in the stroke or worked expansively a greater portion of the stroke of the piston thereby gaining a large percentage of power over the marine engine now commonly in use. The design of this engine recommends it for marine service. The writer would call the attention of steamboat owners and marine engineers to the fact that the advantages to be gained by this engine, are first, the same power can be obtained with an engine of less size; the same power can be obtained with

less pressure upon the boilers, and consequently less wear and tear. The weight of the engine is less than the marine engine now commonly in use. The difference in first cost is trifling.

A trial made with one steamport and chest showed as good results as could be gained from any ordinary steam engine now in use and by turning on the steam on the opposite side an additional power was produced of at least fifty per cent, which can only be accounted for by the concussion caused by two currents of steam coming together from opposite ports, or by the liberation of latent heat not heretofore utilized by the old way of applying steam to a cylinder, as either of the steam ports were of sufficient size to more than supply all the steam necessary when run separately. This improvement can be applied to any engine now in use the only change necessary being that of cylinder and valve gear.

IRON MARKET REPORT.

CLEVELAND, February 28.

A good business has been done the past week in pig iron, confined principally to small orders however. We quote prices unchanged, as follows:

CHARCOAL PIG IRON.

No. 1 Lake Superior charcoal	$23 00@24 50
No. 2 Lake Superior charcoal	23 00@24 50
Nos. 3 and 4 Lake Superior	24 00@25 00
Nos. 5 and 6 Lake Superior	23 00@25 00
Nos. 1, 2, 3, 4, 5, Salisbury	35 00@37 00
Southern charcoal	27 00@30 00

Reported by E. L. Harper & Co., Cincinnati.

The market continues fairly active. The Ohio Valley so recently inundated has begun to revive already and will quickly recover from the results of the recent flood. The mills and foundries are rapidly resuming operations and are requiring crude iron quite liberally. The curtailment of productions of manufactured iron has strengthened the market.

FOUNDRY.

Hanging Rock Charcoal No. 1	$22 50 to $23 50
Hanging Rock Charcoal No. 2	21 25 " 22 25
Strong Neutral Coke No. 1	18 50 " 19 00
" " " No. 2	17 50 " 18 00
American Scotch, No. 1	19 00 to 19 50

GREY FORGE.

Neutral Coke	$16 75 to $17 25
Cold Short	16 25 " 16 75

CAR WHEEL AND MALLEABLE.

Hanging Rock, strictly cold blast	$ 27 75
" " warm blast	24 00 " 24 50
Lake Superior "charcoal" all grades	24 00 " 25 00
Southern Car Wheel, strictly cold blast	26 50 " 27 50

[*Concluded from 1st page.*]

a whole sail breeze with everything set, and from every point of view she follows any position the observer may choose to take. It was painted by Mr. James B. Tyler, of New York City, and son of Mr. R. D. S. Tyler, the well-known book publisher of this city. It is a very creditable work, such as is rarely seen.

A suit in admiralty is now being tried in the United States District Court here, the outcome of which is exciting considerable interest among those concerned in such matters. From what I have thus far learned the case is as follows: It would appear that the propeller Jay Gould, downward bound, on approaching the Limekiln crossing discovered, on her port hand, a tug coming from the opposite direction with a tow of vessels. Both steamers blew one whistle, which of course signified they intended to keep on the proper side of the stream. When in close proximity the captain of the tug, which was the Martin Swain, avers that he saw the green light of the propeller and immediately blew two whistles and made an effort to cross her bows, but was too late to succeed in the effort. The result was, of course, a collision, notwithstanding the propeller kept as far out of the way as it was possible to do. I may be able to give you the decision before the close of this letter. The judge is caissoned by two marines on whose opinion he chiefly relies, which is without a precedent here, so far as I am aware.

A few nights since the Great Western railway steamer, while crossing the river during a dense fog, bound for Windsor, ran into the schooner John Stevenson, which lay moored at the dock, and sank her. Being a tender old craft it is presumable she will prove a total loss. The damages are estimated at $1,600, which is the full value of the vessel. She was built at Napanee, Ont., in 1863, and was 170 tons burden. The railway company will have her raised and see what is left of her. Beside the sinking of the vessel Odette & Wherry's dock was also damaged to the extent of $600.

The following vessel sales have transpired at this port recently: Schooner James C. King to Parker Transportation Co. for $20,000; schooner L. S. Hammond to Hamtramack Freight Co. for $25,000; propeller Anna Smith to Parker Transportation Co. for $40,000; barge Waverly, two-thirds, to Charles Chamberlain, $1,725; schooner New Hampshire to John Dewey, $1,000. The last named is one of the last of her time, having been thirty-seven years in service. Originally she was built of the best of material which accounts for her longevity, and even now is well preserved. Times without number she has been reported a total loss, yet I fail to remember any lives being lost from her.

Some miserable wretch or wretches broke into Murphy Bros. tug office, foot of First street, Saturday, and robbed it of valuables amounting to $64. The pilfer was chiefly valuable clothing.

Of the numerous marine cases now before the United States District Court here there is one of an interesting and peculiar feature which is briefly as follows: Sometime last season the tug J. P. Clark, while en route with a tow on Lake Huron, downward bound, was overtaken by a violent storm and was obliged to cast them adrift. These were the barges Seminole and Wm. Treat. The tug found shelter at Sand Beach. When the storm had subsided she started out for their recovery. The Seminole was found and taken to Port Huron, and on arriving there the captain of the tug was informed by the marine reporter that the Treat had passed down in tow of the steambarge Geo. King minus her deck load. It turned out otherwise, as she became wrecked on Lake Huron. Besides this the tug claims that if proper management had been carried out the barge could have reached the river herself. J. W. H.

CHICAGO.

Special to the Marine Record.

A fire at the Calumet Iron and Steel Company's works at Irondale, South Chicago, caused a loss of some $40,000, fully insured.

Judge Blodgett, in the United States District Court, in the important case of Jacob Johnson, who is the owner of the schooner E. M. Portch, against the steambarge Leland, delivered a very elaborate admiralty opinion, and which we will publish in full under the head of Marine Law next week. It will be remembered that this case was brought by libel to recover damages sustained by a collision between the Portch and Leland on Lake Michigan on the evening of March 26, 1882, nearly off a point midway between Manitowoc and Sheboygan. The schooner was struck on the port bow and cut down to near the water line and sank just outside of Sheboygan harbor and broke up and became a total loss after being driven ashore. The court in summing up the evidence found that the Leland was at fault and properly chargeable for the loss of the Portch and rendered a decree in favor of libellants in the sum of $15,000, with interest, making $16,722.50. Mr. H. W. Magle, proctor for Captain Johnson and Messrs. Schuyler & Kramer for the owners of the Leland.

Mr. O. B. Green, the tug owner, called on Health Commissioner DeWolf Tuesday to ascertain what the intentions of the department were regarding the prosecution of tug owners for violation of the city ordinance in regard to the smoke question. The commissioner stated very emphatically that just so long as they continue to violate the ordinance just so long would he prosecute them. The question has been a continual source of trouble for some years. The defendants in nearly every case put forward the plea that if they adopted a smoke consumer it would require so much of the engineer's attention he would be liable to neglect his boilers, and an explosion would be the result. Dr. DeWolf stated that he would commence prosecuting the various owners of the tugs as soon as the season opened if they did not comply with the ordinance, let the consequences be what they might.

DULUTH.

A map of Two Harbors has just been made.

Steamboat and tug men are beginning to lay plans for the summer's work.

The hull of the City of Winnipeg has been bought by J. D. Howard and Captain Flynn, who will raise her in the spring.

The Bayfield press says the L. S. & L. M. T. Co. has decided to place the well known propeller City of Fremont of the south shore line, on the route formerly occupied by the Manistee.

Captain Burns will sail the tug Eliza Williams again this season. Captain C. O. Flynn will sail the Ella M. Stone again this season. Captain Brown will sail the new ferry steamer Queen of the West, recently purchased by Captain Jos. Lloyd.

KINGSTON.

The propeller Europe was sold last week to Graham Bros. by Messrs. Shickluna. Price, $15,000 The Europe will be placed in a line on the Georgian Bay.

The M. T. Company are making arrangements for the purchase of a number steel grain scoops. The wooden shovles will be done away with altogether. The steel scoops will be much better for shoveling than the wooden ones.

Captain Tim Sullivan, Ed. Vandusen and James Collier, of Picton, have passed the marine examinations.

Captain Havey Brown of Cape Vincent, an old N. T. Co., captain, will sail the propeller Walter B. Frost this year. Captain Miller her former master, will be in command of one of the new steamers now building at Detroit for the same line.

The schooner A. G. Ryan has received a new spar and has undergone a through repair. The George Suffel has also received a general overhauling and the D. Freeman and L. D. Bullock have had necessary attention bestowed them.

The Dominion Wrecking and Salvage Company have retained Dr. Smythe in an important marine case. Last summer while a vessel belonging to Mr. Larkin of St. Catherines, was being towed to Brockville by one of the company's tugs, she ran on a shoal, and he has taken an action to recover the value of repairs and loss of time while the repairs were being made. The defendants claim that there is a rule relating to the river St. Lawrence which makes the vessel responsible, as she should have furnished a pilot.

A number of Rochester gentlemen who think a steamer on Lake Ontario to ply between Charlotte and Alexanderia Bay, on the St. Lawrence, would pay, are organizing a stock company to that end, and have opened negotiations for the purchase of the steamer Flower City which was damaged by fire at Clayton two years ago. A number of subscriptions have already been received. The Captains Estes see money in it, and are at work on the scheme. The Flower City has been partially rebuilt and lengthened. It can be finished and made first class in every respect and be put on the route with the opening of the pleasure travel. The boat can be purchased and completed for $50,000 or less. The parties in charge of the scheme are determined not to fail in their intentions. —*Kingston News.*

PORT HURON.

The Port Huron Marine Engineers' Beneficiary Association was organized on the 20th with eleven charter members. The following officers were elected and installed by ex-National President Reed, of Detroit:

President, W. P. Treleven; Vice President, J. H. Fitzgerald; Treasurer, J. H. Hogan; Secretary, Geo. Bonner; Corresponding Secretary, Haas Maines; Financial Secretary, Charles Cushaine; Conductor, G. H. Miller; Door Keeper, Robert Cameron.

The Port Huron branch is known as No. 43, and the official seal is a valve. Meetings will be held every Wednesday evening in Jas. H. Fitzgerald's office. This organization has branches in almost every port in the United States, and a membership of over 6,000.

AMHERSTBURG.

The tugs belonging to the Strong estate are offered for sale. They are the Sweepstakes, Champion, Stranger and Masters, and have been managed for several years by John R. Gillett.

The Morpeth dock is to run out 500 feet into the lake and will require 800 cords of stone and about 21,000 feet of timber. The stone will probably be got off Pelee Island, and the timber in the neighborhood of the work. Contract price of the work is in the neighborhood of $20,000. Mr. Askwith, of Ottowa, is contractor.

We understand that C. C. Chadwick has disposed of his Twomey's dock to O. Young & Co., of Loraine, O., who will carry on the business here under the management of Captain Mansfield, late master of the schooner Richard Winslow. The probabilities are that it will be lively in the coal business here the coming season.

HAMILTON.

Captain Thomas Armstrong, who for some weeks past has been suffering from inflammation of the lungs, is able to be about again. It will be remembered that Captain Armstrong, on the 11th of December last, in the midst of a storm and when the weather was bitter cold, with others went out in a boat in Lake Ontario and saved the life of one Holmewood, a beach fisherman. On this occasion Ben. Foulds was drowned. Captain Armstrong received such a wetting and caught such a severe cold then that it resulted in the above named affection, from which he has now recovered. It is said that a movement is on foot to secure for the fearless and popular captain the medal of the Royal Humane Society on account of his bravery in saving life.

STURGEON BAY.

It is said that the Goodrich Co. will not place a boat on the Manitowoc, Sturgeon Bay & Menominee route next season unless the canal company gives them free passage through the canal. They—the Goodrich Company—will not permit the people to pay the toll, nor do they purpose doing so themselves.

Captain John Wood, who commanded the schooner Halstead last season, has been consigned to the schooner F. B Gardner, which is also the property of Captain Keith. The name of the new master of the Halstead has not yet been ascertained.

A determined effort is being made by the people of Oconto to induce Congress to appropriate the sum of $50,000 at this session for the purpose of completing the harbor which has recently been commenced at the mouth of the Oconto river.

The boiler of the tug Spear is receiving a thorough overhauling under the supervision of Captain Ed Cox. The journals and slides of the engine were recently sent to Oconto to receive new brasses, and are to be sent back this week. After these repairs are finished some carpenter work is to be done on the house, and the tug is to be painted, salted, and otherwise put in good shape for the coming season's business. The Spear will be employed by the Oconto company in towing lumber scows from the Sturgeon river mills to Oconto.

CANADIAN MARINE AND FISHERIES.

The report of the minister of the marine and fisheries, presented to parliament at Ottawa a day or two since, shows that the total expenditure for this service in 1883 was $1,054,267. The total value of the fisheries of Canada is $17,215,675. There are eleven fish hatcheries in operation. The number of fry distributed in the spring of 1883, consisting of salmon, salmon trout, whitefish, and pickerel, was 83,884,000. In the fall of the same was 50,588,300.

The total number of steamboats in the dominion is 843, with a tonnage of 152,216. One hundred new steamers were added during the year. Of wrecks of sea-going vessels in Canadian waters there were 248, with a tonnage of 81,504. The total loss was $1,448,741, and the number of lives lost was 199. The wrecks on inland waters were 210, with a tonnage of 11,716. The loss in money was $1,304,389, and the number of lives ten. The meteorological service gave 1,185 storm warnings, and 858 were verified. The total expenditure for this service was $51,990.—*Oswego Times.*

FOR SALE,

A Canadian Schooner,

Or will exchange for other property. Capacity 300 tons. Will furnish business for the season of 1884 if required. Address J. M. JONES.
Board of Trade, Detroit, Mich.

FOR SALE,

STEAMBARGE MILWAUKEE.

Her length is 135 feet, beam 26 feet, and hold, 10 feet 10 inches. Boiler 17 feet long, 7 feet diameter; three flues, two 16-inch and one 17-inch. Engine 22x42. Carries 240,000 feet of lumber. Speed, 11 miles light, and 9 1-2 loaded. Insurance valuation, $15,300. Address MARINE RECORD Office, No. 2 South Water street, Cleveland, O.

PIONEER STEAMERS.

The Buffalo Express gives an interesting report of the meeting of the Buffalo historical society in that city on Friday evening last. Among the gifts to the society that are of general interest is a manuscript volume devoted to the early days of steam vessels on Lake Ontario. It was written by Captain Van Cleve, well known in his day as an able navigator and extensive vessel owner on the lakes. The volume in question gives an astonishing number of vessels built at Oak Orchard harbor, Sodus, etc., making a commercial record of these ports such as they will not be likely to regain in this day of monster enterprises and iron vessels.

Captain Van Cleve says he engaged in 1826 as clerk on board the steamer Ontario, which was the commencement of his long connection with the commerce of the lakes. The Ontario was built at Sackett's harbor in 1816. She was rather a baby craft, as compared with such as furrow the water now, but yet quite large enough to try the experiment of driving a vessel by steam. Her deck measure was 110 feet, beam 24 feet, and hold 8½ feet. She measured 240 tons.

"The Ontario," he goes on to say, "was not only the first steamboat built on the lakes, but was the first built on water subject to a swell and determined the interesting problem that steamboats were adapted to the navigation of open seas as well as the rivers."

Her speed was not astonishing, being only about seven miles an hour. The thousand and one details belonging to the lake marine to-day were unknown then, and Captain Van Cleve relates as an instance that no signal bells were for some time invented by which the captain could give orders to the engineer. So when any change of speed was desirable the captain sent word to the engineer by a boy, who roared out "stop her," or "Go ahead," in the engine room and rushed back for more orders.

Captain Van Cleve sailed in a number of vessels all of which have long since passed into history and kindling wood, while the principles they helped to set forth went into the construction and management of better vessels.

Among others the captain tells the following story: "In 1830 Joe Smith, the Mormon, took passage at Genessee river on board the Martha Ogden, having with him a box of his Mormon bibles which he intended to sell at Kingston, Canada. At the time there was a passenger on board by the name of Charles Stuart Dixon, an accomplished young Englishman, who from his strong resemblance to George IV. claimed to be an illegitimate son of that royal person. Captain Van Cleve and Dixon concluded they would have a little fun with Joe Smith by telling him that in Canada it was a criminal offense to sell his bibles, and he would certainly get himself into serious trouble and perhaps into jail. They carried the point so far that poor Smith was glad to make no report of his box of Bibles, and he returned to Rochester, and after doing the fair thing by way of a little good cheer, he lett for those parts where too many have been deluded by his pretended revelations."

Captain Van Cleve also alludes to the building of the steamer Vandalia, in 1840, a picture of which together with the details of her career are to be found in the history of Oswego county, published a few years ago.

COMPULSORY PILOTAGE.

Compulsory pilotage is one of the evils of which American vessel owners make serious complaint. Nor are their complaints without just cause. There was a time when the compulsory feature of our pilotage system was all right, but that day has long since gone by. Our harbors and ports have been greatly improved and the dangers of navigation lessened by the introduction of lights, buoys, beacons, aud other safeguards at the entrance of such harbors and ports. These valuable adjuncts to safe navigation render unnecessary, at this time, the pilotage rules which served a good purpose in former days. It is alleged that in some cases the pilotage fees of a vessel amount to one-quarter of its net earnings for a whole year. Why this should be so we are at a loss to know, but the truth of this state of affairs is well vouched for by a representative of the New England Shipowners' Association. The pilotage charges allowed by some of the States are particularly exorbitant, amounting in the cases of sailing vessels drawing only fifteen feet of water to nearly a hundred dollars for a single trip. It is a fact that in Massachusetts the law permits a vessel to sail from Boston to a coastwise port without exacting compulsory pilotage fees, but if the same vessel, carrying the same cargo and manned by the same crew, should clear for a foreign port her outward and inward pilotage fees would range from fifty to eighty dollars, according to the vessel's size. Masters of vessels capable of piloting their own vessels were relieved from compulsory pilotage by the British Parliament a few years ago, and a like course ought to be pursued by Congress. This matter is now under consideration by the House Committee on Shipbuilding and Ship-owning Interests, but it is difficult to tell what the outcome will be. Any bill looking to the relief of vessels from compulsory pilotage will be vigorously opposed by the several pilots' associations of the country, but it really seems that where the master of an American vessel is competent to carry it safely into port, in all justice he should be permitted to do so. If we ever hope to build up an American marine and regain our carrying trade, the burdens which now weight American vessel-owners must be removed. Among these burdens is the compulsory pilotage system, established by authority of State laws.—*Leader.*

CAPTAIN MARY MILLER.

On the evening of the 16th the steamboat Saline arrived in New Orleans. Mrs. Mary Miller, her captain, repaired to the office of the United States Inspector of Steam Vessels and received her license. The lady had been previously examined as to her competency to take charge of a steamer, and had satisfied the inspector on that source. They therefore proceeded to issue to her a regular captain's license fully authorizing her to assume command of the steamboat Saline, with permission to navigate the waters of the Mississippi, Red, Quachita, and other western rivers. The license is duly sealed and signed by J. I. Butler, United States inspector of hulls, and William Applegate, inspector of boilers. Captain Miller took the usual oath demanded of steamboat captains when licensed to pursue their calling. She subscribed to the articles in a plain hand, "Mary M. Miller." The agony is now over, and a woman has become a regular steamboat captain.

TONNAGE DUES.

I notice in your paper, says a correspondent of the Oswego Times, an article in reference to the circulation of a petition to congres for the removal of tonnage dues from vessels—also to a similar bill having been before congress a year ago—I am glad to see attention again called to this important subject.

In the summer of 1881 I drafted and had printed the following petition:

To the Honorable, Senate and House of Representatives.

We, the undersigned vessel owners, commission merchants, and others engaged in inland commercial pursuits, beg leave to respectfully call your attention to section 4219 U. S. revised statues, which imposes onerous burdens upon our inland commerce by the exaction of tonnage tax from vessels.

Such law having served its purpose as a war measure, now unnecessarily hamper the commerce of inland waters.

We, therefore, respectfully but earnestly pray you honorable bodies to repeal the section referred to, or so modify it as to except American bottoms.

July, 1881.

This petition was numerously signed by business men of this city and placed in the hands of Hon. Joseph Mason, our members of congress.

I also sent copies of the petition to Buffalo, Cleveland, Toledo, Detroit, Milwaukee and Chicago. Also to Ogdensburg and other points, and by letter urged co-operation by obtaining signatures and forwarding the same to their respective members of congress, urging their support to the measure.

A bill was subsequently introduced as stated.

RIVERS AND HARBORS.

The Secretary of War reports immediate appropriations are needed for the improvement of the following rivers and harbors:

Michigan City harbor	$50,000
Wabash river	25,000
Ontonagon river	12,000
Grand Marais harbor	25,000
Menomonee harbor	10,000
Ahnapee harbor	2,000
Two Rivers harbor	4,000
Sheboygan harbor	30,000
Port Washington harbor	7,000
Chicago harbor	20,000
Illinois river	36,000
Grand Haven harbor	12,000
Muskegon harbor	5,000
Portage Lake harbor	25,000
Detroit river	60,000
Sand Beach harbor	75,000
Cleveland harbor	50,000
Huron harbor	5,000
Fairport harbor	5,000
Toledo harbor	20,000
Sandusky harbor	5,000
Ashtabula harbor	13,500
Erie harbor	20,000
Oswego harbor	30,000

PRACTICAL RELIEF FOR AMERICAN SHIPS.

Our tonnage laws compel the payment of tonnage tax on the water ballast space of American-built vessels. No other country taxes water ballast space, hence the new steamer San Pablo, which is about sailing from Philadelphia via New York for Shanghai, will be obliged to pay about $1,600 more Suez canal tolls than an English or French ship of like capacity, because in those ships the water ballast space is not measured for tonnage taxation. With such facts as these to deal is it any wonder that American built ships cannot be sailed profitably in competition with British-built ships. It is with such disadvantages as these that Congress should deal, rather than waste its time over discussing free ships.—*Nautical Gazette.*

An old steamer, known as the Senator, which ran on the Sacramento river in 1850, has been put into drydock in San Francisco to be altered into a temporary barkentine, to enable her to sail to New Zealand, where she is to be used as a barge by an Auckland corporation.

DISEASE CURED

Without Medicine.

A Valuable Discovery for supplying Magnetism to the Human System. Electricity and Magnetism utilized as never before for Healing the Sick.

THE MAGNETON APPIANCE CO.'S

Magnetic Kidney Belt

FOR MEN IS

WARRANTED TO CURE OR MONEY REFUNDED, the following diseases without medicine:—PAIN IN THE BACK, HIPS, HEAD OR LIMBS, NERVOUS DEBILITY, LUMBAGO, GENERAL DEBILITY, RHEUMATISM, PARALYSIS, NEURALGIA, SCIATICA, DISEASES OF THE KIDNEYS, SPINAL DISEASES, TORPID LIVER, **Gout, Seminal Emissions, Impotency, Asthma, Heart Disease, Dyspepsia, Constipation; Erysipelas, Indigestion, Hernia or Rupture, Catarrh, Piles, Epilepsy, Dumb Ague, etc.**

When any debility of the **GENERATIVE ORGANS** occurs, **Lost Vitality, Lack of Nerve Force** and **Vigor, Wasting Weakness,** and all those **Diseases** of a personal nature, from whatever cause, the continuous stream of Magnetism permeating through the parts, must restore them to a healthy action. There is no mistake about this appliance.

TO THE LADIES:—If you are afflicted with Lame Back, Weakness of the Spine, Falling of the Womb, Leucorrhœa, Chronic Inflammation and Ulceration of the Womb, Incidental Hemorrhage or Flooding, Painful, Suppressed and Irregular Menstruation, Barrenness, and Change of Life, this is the Best Appliance and Curative Agent known.

For all forms of **Female Difficulties** it is unsurpassed by anything before invented, both as a curative agent and as a source of power and vitalization.

Price of either Belt with Magnetic Insoles, $10, sent by express C. O. D., and examination allowed, or by mail on receipt of price. In ordering send measure of waist, and size of shoe. Remittance can be made in currency, sent in letter at our risk.

The Magneton Garments are adapted to all ages, are worn over the under clothing, **not next to the body like the many Galvanic and Electric Humbugs advertised so extensively,** and should be taken off at night. They hold their POWER FOREVER, and are worn at all seasons of the year.

Send stamp for the "New Departure in Medical treatment **Without Medicine,**" with thousands of testimonials.

THE MAGNETON APPLIANCE CO.,
218 State Street, Chicago, Ill.

NOTE.—Send one dollar in postage stamps or currency, in letter at our risk, with size of shoe usually worn, and try our Magnetic Insoles, and be convinced of the power residing in our other Magnetic Appliances. Positively no cold feet when they are worn, or money refunded.

CONSUMPTION.

I have a positive remedy for the above disease; by its use thousands of cases of the worst kind and of long standing have been cured. Indeed, so strong is my faith in its efficacy, that I will send TWO BOTTLES FREE, together with a VALUABLE TREATISE on this disease, to any sufferer. Give Express & P. O. address. DR. T. A. SLOCUM, 181 Pearl St., N. Y.

TRAVELERS' REGISTER.

LAKE SHORE & MICHIGAN SOUTHERN.

Commencing Sunday, November 18, at 12 o'clock noon the time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper and twenty-eight minutes slower than the time heretofore in use (Columbus time) by these roads.

Eastward.	Arrive.	Depart.
Fast New York Express	*1 07 A M	*1 22 A M
N Y, B & A Express	*6 37 A M	*7 02 A M
Elyria Accommodation	†8 07 A M	.....
Port Clinton Accommodation	†10 37 A M	.....
Buffalo Accommodation	†10 37 A M	†10 52 A M
N Y & B Fast Express	*1 57 P M	*2 27 P M
Cin. & St. Louis Express	.....	*3 37 P M
Conneaut Accommodation	.....	4 22 A M
Nottingham [sunday only]	9 44 P M	.....
Night Express	†9 42 P M	†10 07 P M

Westward.	Arrive.	Depart.
Fast Limited Express	*11 55 A M	*12 05 A M
Mich Express via Sandusky	*2 22 A M	*2 37 A M
Chicago Express via "	‡6 07 A M	6 32 A M
Mich Accom, Norwalk	.....	†6 12 A M
Conneaut Accommodation	†8 12 A M	.....
Nottingham, [Sunday only]	4 17 P M	1 47 P M
Toledo Express via Norwalk	*12 52 P M	†3 02 P M
St Louis Ex via Sandusky	*1 02 P M	*1 25 P M
C P Ex via Norwalk	†6 02 P M	*6 32 P M
Port Clinton Accommodation	.....	† 4 32P M

Reference marks—* Daily, † daily, except Sunday, ‡ daily, except Monday.

BEE LINE

Cleveland, Columbus, Cincinnati and Indianapolis Railway.

Equipment New and Comprising all Modern Improvements.

☞Tickets by this popular route for sale at all regular Ticket Offices.

E. B. THOMAS, General Manager. **O. B. SKINNER,** Traffic Manager.

A. J. SMITH, General Passenger Agent.

CLEVELAND, OHIO.

CLEVELAND, COLUMBUS, CINCINNATI & INDIANAPOLIS.

Commencing Sunday, November 18th, trains of the Bee Line—Cleveland, Columbus, Cincinnati & Indianapolis Railway—will leave and arrive at Cleveland as follows, CENTRAL STANDARD TIME, 33 minutes slower than Cleveland time:

	Depart
No. 1, Cincinnati & Columbus Express	*7:30 A M
No. 11, Indianapolis & Wheeling Express	6:40 A M
No. 17, Special Columbus & Cincinnati Ex.	1:20 P M
No. 3, Special Ind & St. Louis Express	*1:40 P M
No. 5, Col. Cin., Ind. & St. Louis Express	*6:40 P M
No. 7, Gallion & C.L & W. Acc	4:30 P M
	Arrive.
No. 2, Col. & Cin. & Ind. Express	*6:40 A M
No. 8, Gallion & C. L. & W. Acc	9:10 A M
No 12, St. Louis & Indianapolis Express	*2:50 P M
No. 6, Col. Cin. & Indianapolis Express	9:55 P M
No. 4, Columbus & Cincinnati Express	*8:20 P M
No. 10, Wheeling Express	6:45 P M
No. 14, Col., Cin & N. Y. Fast Line	1:10 A M

Trains marked * daily, all other trains daily except Sunday.

New York, Pennsylvania & Ohio R. R.

NEW YORK, BOSTON AND THE EAST.

The Shortest and Quickest Route to Pittsburg, Washington and Baltimore and the Southeast.

Central or Ninetieth Meridien time, 33 minutes slower than Cleveland city time.

Until further notice trains will leave from the new Central Depot, South Water street and Viaduct as follows:

6.50 a. m. ATLANTIC EXPRESS—(Daily) Pull. man sleeping and hotel coaches from Leavittsburgh 8:35 a. m. to New York, Albany and Boston without change. Arrive at Meadville at 10:40 a. m. (dinner) Franklin at 12:08 p. m, Oil City 12:30 p. m, Corry 12.35 p. m, Jamestown (Lake Chautauqua) 1.35 p. m, Buffalo 5:50 p. m. Rochester 8:20 p. m.; Hornellsville 6:00 p. m. [supper]; Corning 7:25 p. m. Elmira 8:05 p. m. Binghanton 10:05 p. m., Albany 5:00 a. m. Boston 1:45 p. m.; arriving at New York 6:15 a.m.

2:20 p. m. LIMITED EXPRESS—Through Pull. man sleeping coach from Cleveland to New York. Arrives at Meadville at 6:30 p. m, Jamestown 8:47 p. m., Salamanca 9:45 p. m., New York 10:10 a. m.

11:00 p. m. NIGHT EXPRESS—(Daily except Sunday) Seeping coach from Cleveland Hornellsville. Arrive at Youngstown at 1:50 a. m., Meadville 3:25 a. m., Corry 4:59 a. m. Jamestown 5,57 a. m, Buffalo 9:20 a. m., Rochester 12:58 p, m., Hornellsville, 11:00 a m, Corning 12:07 p m, Elmira 12:40 p. m., Binghampton 2:19 p m., New York 9:10 p m. Arrive at Pittsburgh 5:50 a. m., without change.

2:20 p. m. PITTSBURGH EXPRESS — Daily — Through without change, Parlor car attached. Arrives at Youngstown 5:00 p m., Pittsburg 8:02 p. m., Washington 7:09 a. m, Baltimore 8:19 a. m.

4:11 p. m. MAHONING AO MODATION — Stopping at all way stations, arriving at Youngstown 6:55 p. m., Sharon 8:01 p. m., Sharpesville 8:10 p. m.

6:50 a. m. PITTSBURGH EXPRESS — Daily — Through without change. Arrives at Youngstown 9.30 a. m., Sharon 10:30 a. m., Sharpsville 10:40 a. m., Pittsburgh 12 45 p m., Returning, leaves Pittsburgh at 4:15 a. m., 7:45 a. m., 12:55 p. m., and 3:45 p m

10 35 a. m. YOUNGSTOWN AND PITTSBURGH ACOMMODATION—Stopping at all Way stations, arriving at Youngstown 1:40 p. m., Pittsburgh, 5.45 p. m.

Trains arrive at Cleveland, 6:15 a. m., 6:30 p. m., 10.20 a m; 1:05 p. m., and 9:45 p. m,

☞This is the only route by which passengers can reach Corry Elmira, Binghampton, New York City and intermediate points without change. No change to Boston and New England Cities.

Baggage checked through to all points East

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Following is the time in effect Nov. 18, 1883, and until further notice:

GOING EAST.

Lv. Chicago	7.47 a. m.	.....	.....
Arr. Valparaiso	9.37 "	.....	.....
" Fort Wayne.	1.00 p. m.	.....	.....
" New Haven	1.35 "	.....	.....
" West Leipsic	3.45 "	.....	.....
" Arcadia	4.44 "	.....	.....
" Fostoria	4.57 "	.....	.....
" Green Springs	5.44 "	.....	.....
" Bellevue	6.12 "	.....	.....
Lv. Bellevue	6.22 "	7.52 a. m.	.....
Arr Cleveland	9.02 "	10.22 "	Accom.
Lv. Cleveland	.....	10.27 "	3.52 p. m
Arr Painesville	.....	11.33 "	5.05 "
" Ashtabula	.....	12 25 p. m.	6.03
" Conneaut	.....	1.07 "	6.32 "
" Erie	.....	2.09 "	.....
" Dunkirk	.....	3.47 "	.....
" Buffalo	.....	5.22 "	.....

GOING WEST.

Lv Buffalo	9.47 a. m.	.....	.....
Arr Dunkirk	11.24 "	.....	.....
" Erie	1.23 p. m.	.....	Leave
" Conneaut	2.17 "	.....	6.17 a. m.
" Ashtabula	2.50 "	.....	6.46 "
" Painesville	3.44 "	.....	7 43 "
" Cleveland	4.52 "	.....	8.57 "
Lv Cleveland	4.57 "	6.47 a. m.	.....
Arr Bellevue	7.37 "	9.17 "	.....
Lv Bellevue	.....	9.22 "	.....
" Green Springs	.....	9.44 "	.....
" Fostoria	.....	10.22 "	.....
" Arcadia	.....	10 34 "	.....
" West Leipsic	.....	11.30 "	.....
" New Haven	.....	1 35 p. m.	.....
" Fort Wayne	.....	1.52 "	.....
" Valpraiso	.....	5.55 "	.....
" Chicago	.....	7.52 "	.....

Trains run by the Ninetieth Meridian Time, which is nine minutes slower than Chicago time, twenty-eight minutes slower than Columbus time, thirty-three minutes slower than Cleveland time, forty-four minutes slower than Buffalo time, and sixty minutes slower than the Seventp-fifth Meridien time.

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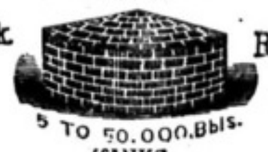

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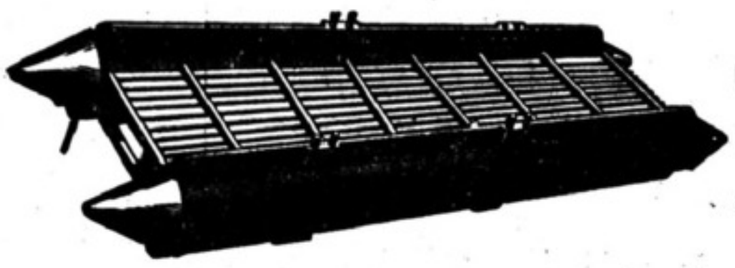

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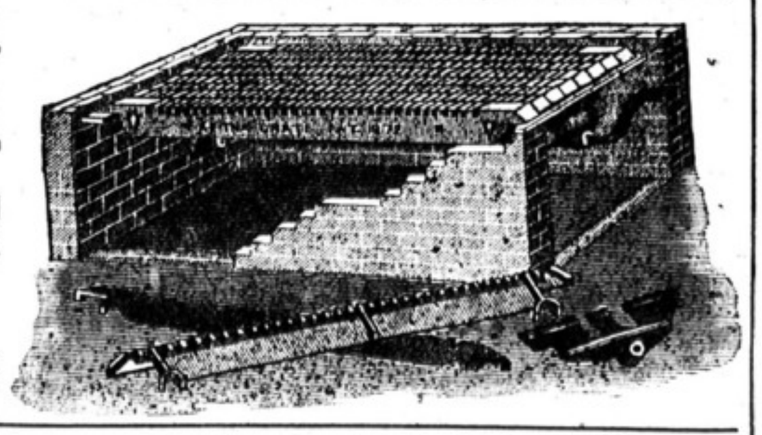

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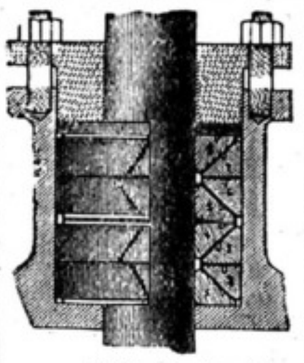

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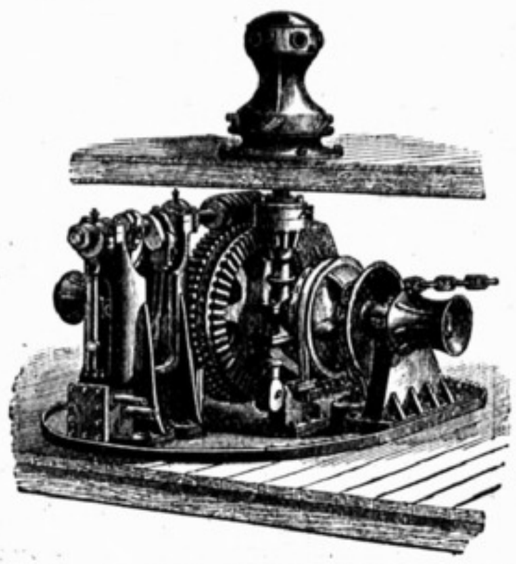
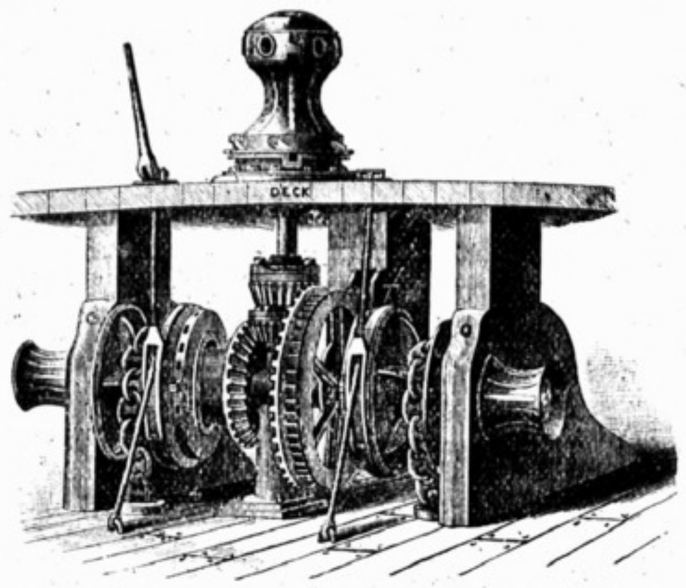


The Providence Patent Steam Capstan Windlass New Style.



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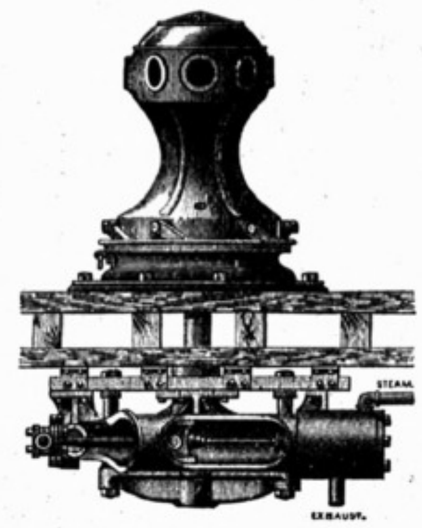

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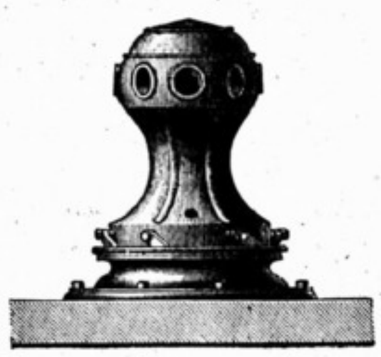

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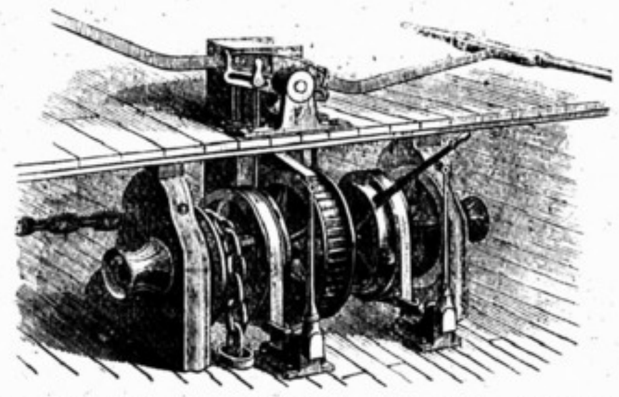

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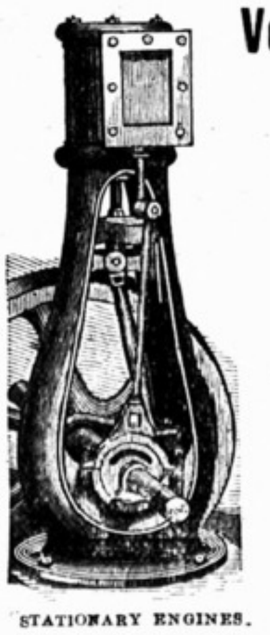

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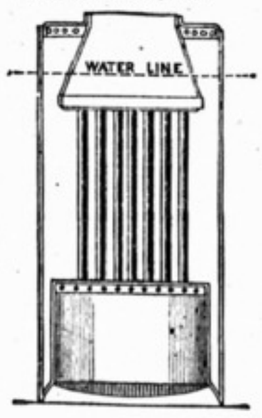

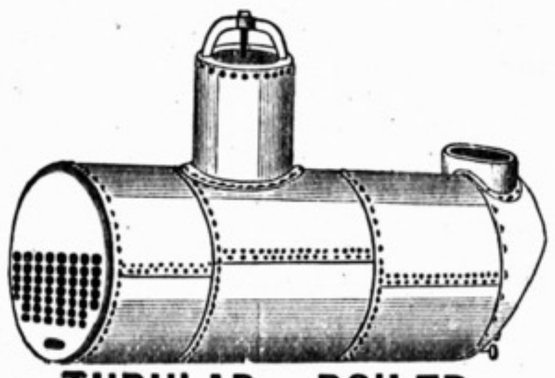

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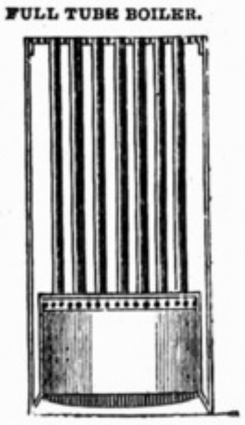

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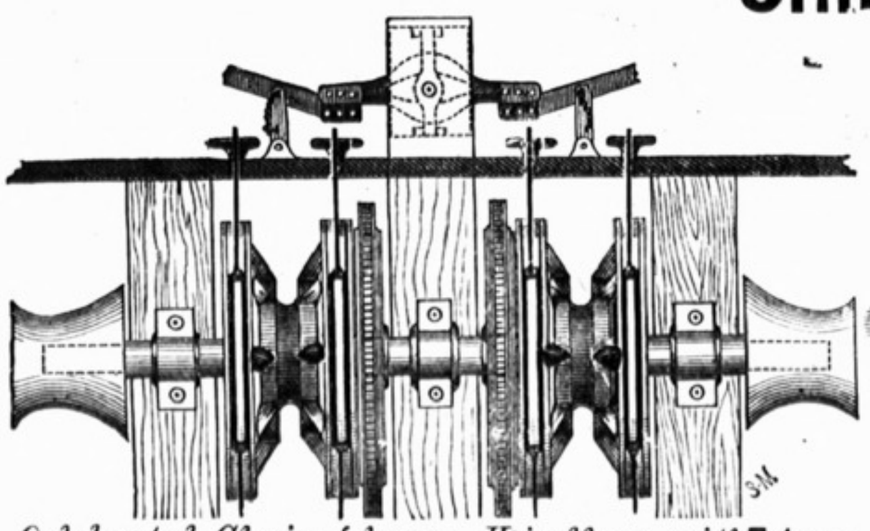

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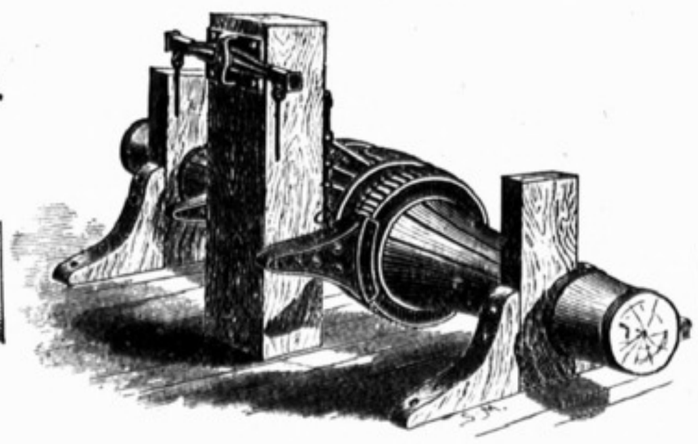
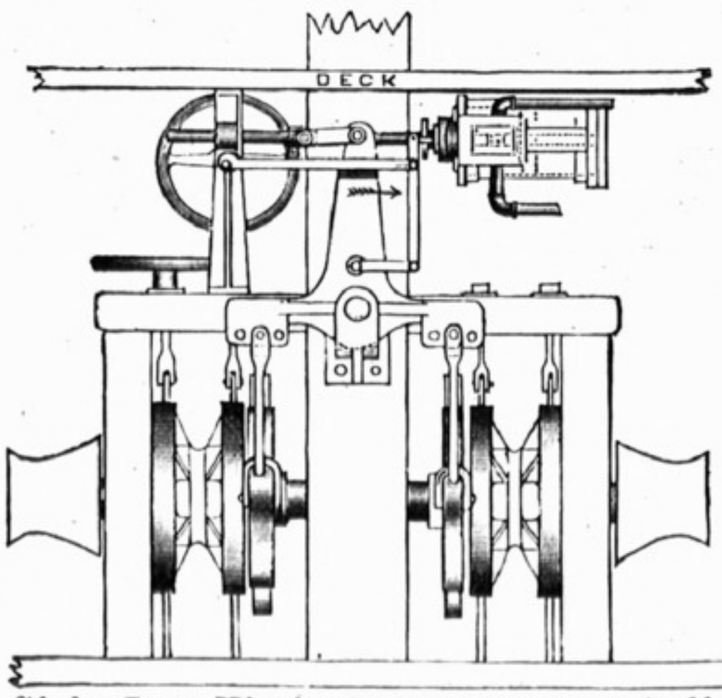


The Common Patent Windlass.



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